Bruhat Bengaluru Mahanagara Palike
PROJECT DIVISION-YALAHANKA

Name of Agency :-M/s KRIDL
Bill No :- 3rd and Final Bill
Name Of work : - Improvements to Sanitary works in Ward No.08, Kodigehalli

BOQ Item No	Description / Chainage	Side	Nos	L m	B1 m	B2 m	Avg width m	Depth m	Quantity	Remarks
Measurement Recorded Date				06-01-2020						
1	KSRRB M200-12.2. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. i) Lime /Cement Concrete. I. By Manual Means :B. Cement Concrete Grade M-15 & M-20. MORTH Specification No. 202. (P.No. 139, I.No. 18.18 of CSR 2018-19)									
	Maruthi nagar 2nd cross road									
	0.00	30.00		1	30.00			0.90	0.30	8.10
	30.00	61.30		1	31.30			0.90	0.30	8.45
	61.30	93.60		1	32.30			0.90	0.30	8.72
	93.60	128.00		1	34.40			0.90	0.30	9.29
	128.00	163.00		1	35.00			0.90	0.30	9.45
	163.00	197.00		1	34.00			0.90	0.30	9.18
	Maruthi nagar 1st cross road									
	0.00	34.00		1	34.00			0.90	0.30	9.18
	34.00	64.50		1	30.50			0.90	0.30	8.24
	64.50	95.00		1	30.50			0.90	0.30	8.24
	95.00	125.50		1	30.50			0.90	0.30	8.24
	125.50	156.00		1	30.50			0.90	0.30	8.24
	156.00	183.50		1	27.50			0.90	0.30	8.24
	183.50	204.50		1	21.00			0.90	0.30	7.43
								0.90	0.30	5.67
	Amco Layot Cross Road									
	0.00	30.00		1	30.00			0.90	0.30	8.10
	30.00	60.00		1	30.00			0.90	0.30	8.10
	60.00	90.00		1	30.00			0.90	0.30	8.10
	90.00	120.00		1	30.00			0.90	0.30	8.10
	120.00	147.00		1	27.00			0.90	0.30	7.29
								Total Quantity	**148.10**	**Cum**
								Quantity Limited to	**140.35**	**Cum**

Contractor

TEJUS CONSULTANTS
Consultant

Assistant Engineer

Assistant Executive Engineer

06/01/2020

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BOQ Item No	Description / Chainage		Side	Nos	L (m)	B1 (m)	B2 (m)	Avg width (m)	Depth (m)	Quantity	Remarks
Measurement Recorded Date				02-01-2020							
2	Cutting road surfaces for pipeline trenches and disposing of the excavated stuff as directed including barricading, danger lighting etc. in the classifications for:. in the following classifications.Cutting Asphalt Road (BWSSB SR 16-17, P.9 I No.16)										
	UGD Restoration 02-01-2020										
	Amco Layout										
	Cross Road										
	0.00	30.00		1	30.00			0.90	0.30	8.10	
	30.00	60.00		1	30.00			0.90	0.30	8.10	
	60.00	90.00		1	30.00			0.90	0.30	8.10	
	90.00	120.00		1	30.00			0.90	0.30	8.10	
	120.00	147.00		1	27.00			0.90	0.30	7.29	
	Kannuramma Layout										
	Cross Road										
	0.00	35.00		1	35.00			0.90	0.30	9.45	
	35.00	65.00		1	30.00			0.90	0.30	8.10	
	65.00	95.00		1	30.00			0.90	0.30	8.10	
	95.00	125.00		1	30.00			0.90	0.30	8.10	
	Badrappa Layout										
	Cross Road										
	0.00	30.00		1	30.00			0.90	0.30	8.10	
	30.00	60.00		1	30.00			0.90	0.30	8.10	
	60.00	90.00		1	30.00			0.90	0.30	8.10	
	90.00	120.00		1	30.00			0.90	0.30	8.10	
	120.00	150.00		1	30.00			0.90	0.30	8.10	
	Earth Work For Manhole										
	New Man Hole										
	1m Depth			11	1.20		1.20	0.75	1.50	17.82	
	1.5 m Depth			7	1.20		1.20	0.80	1.50	12.10	
	3 m Depth			3	1.20		1.20	0.80	1.50	5.18	
								Total Quantity		**149.04**	**Cum**

Contractor

Consultant

Assistant Engineer

Assistant Executive Engineer

02/01/2020

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BOQ Item No	Description / Chainage	Side	Nos	L m	B1 m	B2 m	Avg width m	Depth m	Quantity	Remarks
Measurement Recorded Date			02-01-2020							
3	EXCAVATING FOR PIPE LINE TRENCHES OF REQUIRED WIDTH by mechanical / & manual means including dressing sides, ramming of bottoms, providing barricading, danger lighting, shoring,strutting, dewatering, etc. IN ALL KINDS OF SOIL MIXED WITH BOULDERS of 30 cms size, etc. for: Pipes of all dia. for depth upto 2.0 M in all types of soils(BWSSB SR 17-18, P.51, I No.1.1)									
	Maruthi nagar 2nd cross road									
	0.00	30.00	1	30.00			0.90	1.20	32.40	
	30.00	61.30	1	31.30			0.90	1.20	33.80	
	61.30	93.60	1	32.30			0.90	1.20	34.88	
	93.60	128.00	1	34.40			0.90	1.20	37.15	
	128.00	163.00	1	35.00			0.90	1.20	37.80	
	163.00	197.00	1	34.00			0.90	1.20	36.72	
	Maruthi nagar 1st cross road									
	0.00	34.00	1	34.00			0.90	1.20	36.72	
	34.00	64.50	1	30.50			0.90	1.20	32.94	
	64.50	95.00	1	30.50			0.90	1.20	32.94	
	95.00	125.50	1	30.50			0.90	1.20	32.94	
	125.50	156.00	1	30.50			0.90	1.20	32.94	
	156.00	183.50	1	27.50			0.90	1.20	29.70	
	183.50	204.50	1	21.00			0.90	1.20	22.68	
	Amco Layot Cross Road									
	0.00	30.00	1	30.00			0.90	1.20	32.40	
	30.00	60.00	1	30.00			0.90	1.20	32.40	
	60.00	90.00	1	30.00			0.90	1.20	32.40	
	90.00	120.00	1	30.00			0.90	1.20	32.40	
	120.00	147.00	1	27.00			0.90	1.20	29.16	
							Total Quantity		**592.38**	
							Quantity Limited to		**398.29**	**cum**

Contractor

Consultant

Assistant Engineer

Assistant Executive Engineer

02/01/2020

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BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
					m	m	m	m	m		
Measurement Recorded Date				03-01-2020							
4	Supplying, lowering, laying, jointing, testing and commissioning of Glazed Stone Ware Pipes of following dia, conforming to IS 651:1992,IS 4127 with latest amendments, including conveying to work site, caulking with hemp dipped in tar and jointing with CM 1:1.5 using OPC, perfect linking and curing for 10 days and testing with water etc. with all lead, lifts and as per Technical Specifications. The cost to include the cost of all jointing materials, necessary survey works for laying of sewer lines etc. complete. The contractor will make own arrangements for procuring water for testing.230 mm dia. pipes(BWSSB SR 17-18, P.157 I.No 3.4)										
	Maruthi nagar 2nd cross road										
	0.00	30.00		1	30.00					30.00	
	30.00	61.30		1	31.30					31.30	
	61.30	93.60		1	32.30					32.30	
	93.60	128.00		1	34.40					34.40	
	128.00	163.00		1	35.00					35.00	
	163.00	197.00		1	34.00					34.00	
	Maruthi nagar 1st cross road										
	0.00	34.00		1	34.00					34.00	
	34.00	64.50		1	30.50					30.50	
	64.50	95.00		1	30.50					30.50	
	95.00	125.50		1	30.50					30.50	
	125.50	156.00		1	30.50					30.50	
	156.00	183.50		1	27.50					27.50	
	183.50	204.50		1	21.00					21.00	
	Amco Layot Cross Road										
	0.00	30.00		1	30.00					30.00	
	30.00	60.00		1	30.00					30.00	
	60.00	90.00		1	30.00					30.00	
	90.00	120.00		1	30.00					30.00	
	120.00	147.00		1	27.00					27.00	
									Total Quantity	**548.50**	
									Total Quantity	**369.20**	**Sqm**

Contractor

TEJUS CONSULTANTS Consultant

Assistant Engineer

Assistant Executive Engineer

03/01/2020

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BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
					m	m	m	m	m		
Measurement Recorded Date											
5	Labour charges for laying and jointing glazed stone ware pipes of 0.6m length and of specified dia., of tested quality conforming to IS 651 of 1965 including caulking with hemp yarn, jointing with CM 1:2 and testing with water etc. complete for: (Rate to include cost of jointing materials and transportation of pipes from store work site but excluding the cost of earth work) - Glazed Stone Ware pipe of 230 mm dia (P.No 159 I .No.7.3 BWSSB 2017-18)										
	Maruthi nagar 2nd cross road										
	0.00	30.00		1	30.00					30.00	
	30.00	61.30		1	31.30					31.30	
	61.30	93.60		1	32.30					32.30	
	93.60	128.00		1	34.40					34.40	
	128.00	163.00		1	35.00					35.00	
	163.00	197.00		1	34.00					34.00	
	Maruthi nagar 1st cross road										
	0.00	34.00		1	34.00					34.00	
	34.00	64.50		1	30.50					30.50	
	64.50	95.00		1	30.50					30.50	
	95.00	125.50		1	30.50					30.50	
	125.50	156.00		1	30.50					30.50	
	156.00	183.50		1	27.50					27.50	
	183.50	204.50		1	21.00					21.00	
	Amco Layot Cross Road										
	0.00	30.00		1	30.00					30.00	
	30.00	60.00		1	30.00					30.00	
	60.00	90.00		1	30.00					30.00	
	90.00	120.00		1	30.00					30.00	
	120.00	147.00		1	27.00					27.00	
								Total Quantity		**548.50**	**Rmt**

Contractor

Consultant

Assistant Engineer

Assistant Executive Engineer

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BOQ Item No	Description / Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
				m	m	m	m	m		
Measurement Recorded Date			04-01-2020				to 13-01-2020			
7	Providing house connection with excavation in all types of soils without damaging the other utilities and supplying and laying 25 mm OD MDPE pipe (PE80) manufactured in accordance with ISO 4427 - 1996 with minimum required strength of 8 Mpa, hydraulic design stress of 6.3 Mpa and with minimum wall thickness of 2.3 mm by making the bore of 15 mm dia. size on the Board's supply mains of 100 mm dia. using drilling bits or machines only and laying the pipe line at a depth not less than 0.45 mtrs. from the road surface, including providing 40 mm dia. "A" class GI pipe as casing over the MDPE pipe from the bore point and upto the entrance of the premises and removing the stone slab covering of the drain and dismantling the size stone masonry wherever necessary and making bore in the wall of the premises. On entering the premises, connection should be continued with 20 mm GI pipe by making "U" shape for the meter point below the ground level by making pit with sufficient space for the easy installation and removal of the water meter and providing vertical stand pipes on both sides of the mater. The connection should be secured firmly on the Board's main pipe with SS / Brass . ferrule of size 1/2" x 3/4" and fixing the union joint and gate valve / stop cock before the meter point and a reflex valve / non-return valve should be fixed on the connection after the meter point. (All these fixtures should be of standard quality conforming to IS). The compression fittings for MDPE pipes conforming to ISO 14236 and its latest versions. The excavated trench should be refilled with soft selected earth and the dismantled masonry of the drain should be re-constructed with available size stones in CM 1:8 and providing coping in CC 1:3:6 wherever required and the stone slab covering should be refixed in position with pointing in CM 1:3 and also the bored wall of the premises should be re-done to the original position and the rates are inclusive of the cost of all the materials, cement, sand water etc., required for these works. The road suface should be compacted well and brought to the original condition and the excess earth or debris should be									
	Maruthi nagar 2nd cross road									
	0.00	30.00	2	8					16.00	
	30.00	61.30	2	5					10.00	
	61.30	93.60	2	3					6.00	
	93.60	128.00	2	4					8.00	
	128.00	163.00	2	2					4.00	
	163.00	197.00	2	5					10.00	
	Maruthi nagar 1st cross road									
	0.00	34.00	2	6					12.00	
	34.00	64.50	2	7					14.00	
	64.50	95.00	2	3					6.00	
	95.00	125.50	2	5					10.00	
	125.50	156.00	2	2					4.00	
	156.00	183.50	2	4					8.00	
	183.50	204.50	2	7					14.00	
								Total Quantity	**122.00**	**No's**

Contractor

TEJUS CONSULTANTS
Consultant

Assistant Engineer

Assistant Executive Engineer

13/1/2020

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BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
					m	m	m	m	m		
Measurement Recorded Date					06-01-2020						
8	KSRRB M400-6.1 : Construction of granular sub-base by providing close graded cushed stone aggregates of granite / trap / basalt material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method For Grading-II Material (BwsSB SR 2016-17, P-280 I-20.4)										
	Maruthi nagar 2nd cross road										
	0.00	30.00		1	30.00			0.90	0.15	4.05	
	30.00	61.30		1	31.30			0.90	0.15	4.23	
	61.30	93.60		1	32.30			0.90	0.15	4.36	
	93.60	128.00		1	34.40			0.90	0.15	4.64	
	128.00	163.00		1	35.00			0.90	0.15	4.73	
	163.00	197.00		1	34.00			0.90	0.15	4.59	
	Maruthi nagar 1st cross road										
	0.00	34.00		1	34.00			0.90	0.15	4.59	
	34.00	64.50		1	30.50			0.90	0.15	4.12	
	64.50	95.00		1	30.50			0.90	0.15	4.12	
	95.00	125.50		1	30.50			0.90	0.15	4.12	
	125.50	156.00		1	30.50			0.90	0.15	4.12	
	156.00	183.50		1	27.50			0.90	0.15	3.71	
	183.50	204.50		1	21.00			0.90	0.15	2.84	
								Total Quantity		**54.20**	
								Total Quantity		**54.03**	**Cum**

Contractor

TEJUS CONSULTANTS Consultant

Assistant Engineer

Assistant Executive Engineer

06/01/2020

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BOQ Item No	Description / Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
				m	m	m	m	m		
Measurement Recorded Date				08-01-2020						
9	Wet Mix Macadam, Providing.laying, spreading and compacting cushed stone aggregates of granite trap/basalt to wet mis macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of 4 mixed method of tipper to site, laying in uniform layers with paver in sub-base base course on well prepared surface and compacting with bratory roller to achieve the desired density complete as per specifications MORTH Specification No. 406 (BwssB SR 2016-17)									
	Maruthi nagar 2nd cross road									
	0.00	30.00		1	30.00		0.90	0.20	5.40	
	30.00	61.30		1	31.30		0.90	0.20	5.63	
	61.30	93.60		1	32.30		0.90	0.20	5.81	
	93.60	128.00		1	34.40		0.90	0.20	6.19	
	128.00	163.00		1	35.00		0.90	0.20	6.30	
	163.00	197.00		1	34.00		0.90	0.20	6.12	
	Maruthi nagar 1st cross road									
	0.00	34.00		1	34.00		0.90	0.20	6.12	
	34.00	64.50		1	30.50		0.90	0.20	5.49	
	64.50	95.00		1	30.50		0.90	0.20	5.49	
	95.00	125.50		1	30.50		0.90	0.20	5.49	
	125.50	156.00		1	30.50		0.90	0.20	5.49	
	156.00	183.50		1	27.50		0.90	0.20	4.95	
	183.50	204.50		1	21.00		0.90	0.20	3.78	
	UGD Restoration									
	Amco Layout									
	Cross Road									
	0.00	30.00		1	30.00		0.90	0.20	5.40	
	30.00	60.00		1	30.00		0.90	0.20	5.40	
	60.00	90.00		1	30.00		0.90	0.20	5.40	
	90.00	120.00		1	30.00		0.90	0.20	5.40	
	120.00	147.00		1	27.00		0.90	0.20	4.86	
	Kannuramma Layout									
	Cross Road									
	0.00	35.00		1	35.00		0.90	0.20	6.30	
	35.00	65.00		1	30.00		0.90	0.20	5.40	
	65.00	95.00		1	30.00		0.90	0.20	5.40	
	95.00	125.00		1	30.00		0.90	0.20	5.40	
	Badrappa Layout									
	Cross Road									
	0.00	30.00		1	30.00		0.90	0.25	6.75	
	30.00	60.00		1	30.00		0.90	0.25	6.75	
	60.00	90.00		1	30.00		0.90	0.25	6.75	
	90.00	120.00		1	30.00		0.90	0.25	6.75	
	120.00	150.00		1	30.00		0.90	0.25	6.75	
							Quantity Limited to		**154.98**	**Cum**

Contractor

Consultant

Assistant Engineer

Assistant Executive Engineer

08/1/2020

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BOQ Item No	Description / Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
				m	m	m	m	m		
Measurement Recorded Date				15-01-2020						
10	Refilling pipeline and foundation with selected trenches available earth form trench excavation and foundation inlcuding 5 watering, consolidation in layers of 15cms., thickness including disposing off the surplus earth with all leads & lifts.(BwsSB SR 2016-17, P-9 I-2)									
	Same as I.No 3 Qty								592.38	
	Deductions									
	Pipe Volume		-1	401.50	3.14		0.02		-28.38	
	GSB Qty								-54.03	
	WMM Qty								-154.98	
							Total Quantity		354.99	cum
							Quantity Limited to		239.78	Sqm

Contractor

TEJUS CONSULTANTS

Consultant

Assistant Engineer

Assistant Executive Engineer

15/01/2020

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Pre Measurements

BBQ Item No	Description / Chainage / Measurement Recorded Date	Side	Nos	L m	B1 m	B2 m	Avg width m	Depth m	Quantity	Remarks
				09-01-2020						
12	Dismantling the damaged or collapsed manhole of 4" dia conical in shape and reconstructing the same with machine made wire 6 brick in CM (1:4) as per design and specification of new cut manhole 4" dia with old frame and cover excluding bed concrete 13.6 (RwssR SR 2016-17, P-97, I-92 MTR DEPTH									
	old Man Hole Rising									
	Maruthi nagar 2nd cross road		1						1.00	
	Maruthi nagar 1st cross road		1						1.00	
	Amco Layout									
	Cross Road		3						3.00	
	Kannuramma Layout									
	Cross Road		4						4.00	
	Badrappa Layout									
	Cross Road		3						3.00	
							Total		**12.00**	**No's**

Chd. & Tc

Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore-92

Contractor

TEJUS CONSULTANTS
Consultant

Assistant Engineer

Assistant Executive Engineer

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SI.No / Item No	Description / Chainage / Measurement Recorded Date	Side	Nos	L m	B1 m	B2 m	Avg width m	Depth m	Quantity	Remarks
				06-01-2020			to	20-01-2020		
13	Providing and constructing "wire cut brick manhole chambers" using sulphate resistant cement, conical in shape at top with C.C. 1:3:6 foundation using 40 mm and down size graded metal of approved quality and with an offset of 0.15 m alround the chamber and brick masonry in C.M. 1:4 plaster with wire cut bricks of approved quality and CM plaster 1:3 proportion 12 mm thick inside and outside except for the conical surface outside where the thickness of plaster shall be 20 mm thick, with 1:6 slope in the concrete towards the central drain, finished smooth and fixing of pipes in CC 1:2:4 graded metal of 20 mm and down size including conveying to work spot supplying & fixing SFRC manhole frame and cover confirming to IS:12592 with latest amendments in CC 1:2:4, supplying and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia, Grade Fe-415 steel bar (as per IS 1786) staggered at 30 cms apart as detailed in Technical Specifications and as directed, watering, curring, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, dewatering, engraving manhole No. with flow irection on the inner conical surface etc., as per the drawing with wire cut bricks as per technical pecifications for the following diameters & depths by using Ordinary Port Land Cement. (inclusive of earthwork for all types of soil) (BwsSB SR 2017-18, P-80 I-83)									
	For 1.0 m depth									
	Maruthi nagar 2nd c/s rd		2						2.00	
	Maruthi nagar 1st c/s rd		3						3.00	
	Amco Layout									
	Cross Road		2						2.00	
	Kannuramma Layout									
	Cross Road		2						2.00	
	Badrappa Layout									
	Cross Road		2						2.00	
									11.00	**No's**
	For 1.5 m depth									
	Maruthinagar 2nd c/s rd		2						2.00	
	Maruthinagar 1st c/s rd		2						2.00	
	Amco Layout									
	Cross Road		1						1.00	
	Kannuramma Layout									
	Cross Road		1						1.00	
	Cross Road Badrappa Layout		1						1.00	
									7.00	**No's**
	For 3 m depth									
	Kannuramma Layout									
	Cross Road		2						2.00	
	Cross Road Badrappa Layout		1						1.00	
									3.00	**No's**

Contractor

Consultant

Assistant Engineer

Assistant Executive Engineer

20/1/2020

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BOQ Item No	Description / Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
				m	m	m	m	m		
Measurement Recorded Date				23-01-2020						
14	Disposong off the excess excavated earth of all type up to a distance mentioned Every Km beyond 5 KM 8 Considering 10 Km below by vehicle including loading unloading with all lifts labour HOM of machinery etc., complete (BWSSB SR 2016-17, Pg-10, Item-7)									
	Concrete Dismantling		Qty Vide Item No 01						148.10	
	Pipe Volume Qty		1	401.50	3.14		0.02		28.38	
			Qty Vide Item No 02						149.04	
			50 % Qty Vide Item No 03						296.19	
	Over Burdan Earth									
	Maruthinagar 2nd c/s rd		1	30.00			1.50	1.20	54.00	
	Maruthinagar 1st c/s rd		1	60.00			1.20	0.60	43.20	
	Amco Layout									
	Cross Road		2	70.00			0.85	0.60	71.40	
	Kannuramma Layout									
	Cross Road		2	57.00			0.70	0.75	59.85	
	Badrappa Layout									
	Cross Road		2	50.00			0.80	0.60	48.00	
							Total		**898.16**	**Cum**

Contractor

Consultant

Assistant Engineer

Assistant Executive Engineer

23/01/2020

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MBQ Item No	Description / Chainage / Measurement Recorded Date	Side	Nos	L m	B1 m	B2 m	Avg width m	Depth m	Quantity	Remarks
15	Hire Charges for 2HP dewatering pump to bail out water at leaking pits inclusive of hire charges etc, complete Rs.1300/- per day of 8hours shift per day (BWSSB SR 16-17 Sl.No-4, P-34)									
	Maruthi nagar 2nd cross road		1						1.00	
	Maruthi nagar 1st cross road		1						1.00	
	Amco Layout									
	Cross Road		1						1.00	
							Total		3.00	Days

Contractor

Consultant

Assistant Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone

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